

**SUBCHAPTER B : CERTIFICATION OF WATERWORKS PERSONNEL**  
**§§290.27-290.36**

**§290.27. General.**

(a) It is the purpose of these rules and regulations to set forth a uniform procedure for the administrative issuance of certificates of competency to waterworks personnel seeking compliance with state statutes regulating their operations.

(b) Certificates of competency are established for persons in direct responsible charge, that is, who have active daily on-site responsibility for a water production system, a water treatment plant, a water distribution system, or a major portion of such a system. Certification of supervisors is encouraged, as is that of subordinates, who are directly involved in water supply technical operations.

(c) Certification is available to operators of all systems which furnish drinking water to the public, whether or not a certified operator for a particular water system is required by law.

(d) The Texas certification program is designed to stimulate training among its thousands of waterworks operators who are widely spread throughout the entire state. Such training helps to develop knowledge and technical skills which promotes career growth in the water utility industry and protects the public health by increasing assurance that safe drinking water is being provided to the consumer. Water personnel should become certified at the highest grade commensurate with his or her qualifications.

(e) Certification may be made a part of an employee position requirement to provide adequate staffing of utility systems, and it might result in a means for a person to advance into a better and more responsible position; however, certification is not intended to be a rating system for upgrading employees or for establishing salary levels. It is a process whereby a person can be recognized for his skills and knowledge in the water utility industry.

(f) The statutory authorization for these rules is the Health and Safety Code, Chapter 341, "Minimum Standards of Sanitation and Health Protection Measures."

**§290.28. Definitions.**

The following words and terms, when used in this undesignated head, shall have the following meanings, unless the context clearly indicates otherwise.

**Certificate** - The certificate of competency issued by the commission which states that the operator has qualified for certification at the grade specified. The certificate shall have the original or printed signature of the executive director and chair of the commission. The commission may issue the following certificates:

- (A) Grade A Water,
- (B) Grade B Surface Water,
- (C) Grade B Groundwater,
- (D) Grade B Distribution,
- (E) Grade C Surface Water,
- (F) Grade C Groundwater,

- (G) Grade C Distribution; and
- (H) Grade D Water.

**Commission** - the Texas Natural Resource Conservation Commission.

**Daily on-site responsibility** - An individual who actually performs work, makes decisions, or gives direction to others concerning the operation of a water plant, water well, or water distribution system; and such work, decision, or direction is a part of the daily responsibilities of such individual as opposed to periodic, occasional, or regular responsibilities on a less frequent basis.

**Designated courses** - The minimum 20-hour courses or their equivalent required to obtain a certificate, as specified in these rules and regulations. The designated courses shall include one or more of the following: basic water works operation, groundwater production, surface water production, water distribution, water laboratory, safety, pump and motor maintenance and management. Courses offered by the Water and Wastewater Training Division, Texas A&M University Engineering Extension Service or similar approved courses shall be considered by the commission to be designated courses.

**Executive Director** - the executive director of the Texas Natural Resource Conservation Commission.

**Experience** - Actual work experience, full or part-time, in water supply operation, maintenance, distribution, laboratory analysis or other approved practices considered essential for production of final product from the water supply system.

(A) Certificates of Competency shall not be issued to managerial or administrative officials such as mayors, city managers, councilpersons or utility board members unless they conduct daily, on-site operational activities for a public water system. Certificates also will not be issued to support personnel such as secretaries, billing clerks, customer service representatives, meter readers, radio dispatchers, nor to employees of state and/or federal agencies having regulatory authority over public water systems.

(B) To be fully acceptable, work experience presented to meet requirements for a surface water production certificate must be in surface water operations; work experience presented to meet requirements for a groundwater production certificate must be in groundwater operations; and work experience presented to meet requirements for a distribution certificate must be in distribution operations.

(C) At least one-half of the minimum required experience must be in the same field as the certificate applied for. For example, at least one year of actual surface water treatment/production experience must be obtained to qualify for a Grade C surface water certificate and 2 1/2 years of actual surface water treatment production experience must be obtained before applying for a Grade B surface water certificate.

**Training credit** - The hours of credit allowed by the commission for attendance at training which has been approved in accordance with the provisions in these rules and regulations.

**Water supply system** - The works and auxiliaries for production, treatment, storage, and distribution of the water from the sources of supply to the free-flowing outlet of the ultimate consumer.

**Waterworks operator**--Any person trained in the purification or distribution of a public water supply who has a practical working knowledge of the chemistry and bacteriology essential to the practical mechanics of water purification and who is capable of conducting and maintaining the purification processes in an efficient manner.

(A) Surface water operator--An operator with daily on-site responsibility for producing and/or treating any surface water used as a water source for a public water supply.

(B) Groundwater operator--An operator with daily on-site responsibility for producing and/or treating any groundwater used as a water source for a public water supply.

(C) Distribution system operator--An operator with daily on-site responsibility for delivering a sufficient volume of drinking water at the required pressure while maintaining water quality.

**§290.29. Administration.**

(a) The commission shall be responsible for the following:

(1) receiving and evaluating applications and pertinent documents to determine whether qualification requirements are met by the applicant and notifying applicant as to action taken;

(2) preparing and administering examinations;

(3) supervising and grading examinations or arranging for the supervision and grading of examinations and notifying applicant as to result of examination (pass or fail);

(4) issuing new and renewal certificates;

(5) maintaining records of qualifications of operators having valid certificates;

(6) maintaining a register of operators having valid certificates;

(7) maintaining a register of water supply systems having certified personnel;

(8) approving training for certification credit;

(9) maintaining transactions of committee meetings;

(10) collection of fees.

**§290.30. Qualifications.**

(a) Certification by examination. All individuals shall meet the following requirements based upon formal education, specialized training courses, actual operating experience, and passing of written examinations. All applicants shall be required to pass the current examinations covering the fields of waterworks operation.

(b) Grade A water certificate. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent, eight years of experience, 160 hours of training credit. (See paragraph (4) of this subsection);

(2) college degree (bachelor's) with a major in an engineering discipline eligible for registration as a professional engineer, or in chemistry, biology, or bacteriology, and five years of experience, and 160 hours of training credit. (See paragraph (4) of this subsection);

(3) college degree (master's) with a major in any engineering discipline eligible for registration as a professional engineer, or in chemistry, biology, or bacteriology, and four years of experience, and 160 hours of training credit. (See paragraph (4) of this subsection);

(4) the 160 hours of training credit indicated in paragraphs (1)-(3) of this subsection shall include each of the following designated courses, or the equivalent:

- (A) groundwater production;
- (B) surface water production;
- (C) water distribution;
- (D) water laboratory;
- (E) safety; and
- (F) management;

(5) For the years of experience required for Grade A certificates, one year of college (32 semester hours) or an additional 40 hours of approved training credits may be substituted for one year of the experience requirement. In no case shall the actual experience be less than six years for high school graduates, five years for college graduates with bachelor's degrees, or four years for college graduates with master's degrees.

(c) Grade B surface water certificate. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent; and five years of experience, and 100 hours of training credit. (See paragraph (3) of this subsection);

(2) college degree (bachelor's) with a major in any engineering discipline eligible for registration as a professional engineer, or in chemistry, biology, or bacteriology; and one year of experience, and 100 hours of training credit. (See paragraph (3) of this subsection);

(3) the 100 hours of training credit indicated in paragraphs (1) and (2) of this subsection shall include each of the following designated courses, or the equivalent:

- (A) surface water production;
- (B) water distribution;
- (C) safety; and
- (D) water laboratory.

(d) Grade B groundwater certificate. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent; and five years of experience, and 100 hours of training credit. (See paragraph (3) of this subsection);

(2) college degree (bachelor's) with a major in any engineering discipline eligible for registration as a professional engineer, or in chemistry, biology, or bacteriology; and one year of experience, and 100 hours of training credit. (See paragraph (3) of this subsection);

(3) the 100 hours of training credit indicated in paragraphs (1) and (2) of this subsection shall include each of the following designated courses, or the equivalent:

(A) groundwater production;

(B) water distribution;

(C) water laboratory; and

(D) safety;

(4) For the years of experience required for Grade B groundwater certificates, one year of college (32 semester hours) or an additional 40 hours of approved training credits may be substituted for one year of the experience requirement. In no case shall the actual experience be less than three years for a high school graduate or one year for a college graduate.

(e) Grade B distribution certificate. Education, experience and training requirements are as follows:

(1) high school graduation, or the equivalent; and five years of experience, and 100 hours of training credit. (See paragraph (3) of this subsection);

(2) college degree (bachelor's) with a major in any engineering discipline eligible for registration as a professional engineer, or in chemistry, biology, or bacteriology; and one year of experience, and 100 hours of training credit. (See paragraph (3) of this subsection);

(3) the 100 hours of training credit indicated in paragraphs (1) and (2) of this subsection shall include each of the following designated courses, or the equivalent:

(A) water distribution,

(B) safety,

(C) pump and motor maintenance; and

(D) water laboratory.

(4) Substitution for experience. For the years of experience required for grade b distribution certificates, one year of college (32 semester hours) or an additional 40 hours of approved training credits may be substituted for one year of the experience requirement. In no case shall the actual experience be less than three years for a high school graduate or one year for a college graduate.

(f) Grade C surface water certificate. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent; and two years of experience, and 60 hours of training credit. (See paragraphs (2) and (3) of this subsection);

(2) 40 hours of training credit which shall consist of the following designated courses, or their equivalent:

(A) basic waterworks operation; and

(B) surface water production;

(3) the remaining 20 hours shall be in one of the following courses:

(A) water laboratory;

(B) water utility safety;

(C) water distribution;

(D) chlorinator maintenance;

(E) pump and motor maintenance; or

(F) water utility calculations.

(4) Substitution for experience. For the years of experience for Grade C surface water certificates, one year of college (32 semester hours) or an additional 40 hours of approved training credits may be substituted for one year of the experience requirement. In no case shall the actual experience be less than one year.

(g) Grade C groundwater certificate. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent; and two years of experience and 60 hours of training credit. (See paragraphs (2) and (3) of this subsection);

(2) 40 hours of training credit which shall consist of the following designated courses, or their equivalent:

(A) basic waterworks operation; and

(B) groundwater production.

(3) the remaining 20 hours which must be in one of the following courses:

(A) water laboratory;

- (B) water distribution;
- (C) chlorinator maintenance;
- (D) pump and motor maintenance;
- (E) water utility safety; or
- (F) water utilities calculations;

(4) For the years of experience for Grade C groundwater certificates, one year of college (32 semester hours) or an additional 40 hours of approved training credits which may be substituted for one year of the experience requirement. In no case shall the actual experience be less than one year.

(h) Grade C distribution certificate. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent; and two years' experience and 60 hours of training credit. (See paragraphs (2) and (3) of this subsection);

(2) 40 hours of the training which shall consist of the following designated courses, or their equivalent:

- (A) basic waterworks operations; and
- (B) water distribution;

(3) the remaining 20 hours must be in one of the following courses:

- (A) pump and motor maintenance;
- (B) chlorinator maintenance;
- (C) water laboratory;
- (D) water utility safety;
- (E) water utilities calculations; or
- (F) valve and hydrant maintenance.

(4) For the years of experience for Grade C distribution certificates, one year of college (32 semester hours) or an additional 40 hours of approved training credits may be substituted for one year of the experience requirement. In no case shall the actual experience be less than one year.

(i) Grade D water certificate. A Grade D water certificate is not renewable if the operator is employed at a system of 250 connections or more; surface water systems must have an operator with at

least Grade C surface water certification. Education, experience, and training requirements are as follows:

(1) high school graduation, or the equivalent; and no experience, and 20 hours of training credit. (See paragraph (3) of this subsection);

(2) less than high school, and no experience, and 40 hours of training credit. (See paragraph (3) of this subsection);

(3) 20 hours of training credit indicated in paragraphs (1) and (2) of this subsection must be a course in basic waterworks operation, or its equivalent.

#### **§290.31. Applications.**

(a) Application for certification shall be made on a standard form provided by the commission and signed by the applicant. All statements and qualifications given by the applicant are subject to verification by the commission. Misrepresentation or falsification of information by the applicant shall be grounds for rejection of an application.

(b) Each application shall be accompanied by the appropriate fee. If application is made for two or more grades, the fee shall be for the sum of each certificate applied for on the application form. A certificate will be issued for the highest level passed. Approved applications and fees are valid for twelve months from the date of application. If an examination has not been taken within twelve months from the date of application, a new application must be submitted with another fee.

(c) Grade A, B, and C applicants shall list two references, preferably a current and a previous supervisor, whom the commission may contact to verify the applicant's work experience.

(d) The applicant shall furnish evidence of any training credit or proof of education when requested by the commission.

(e) Any examination taken by the applicant prior to the commission's approving the corresponding application shall be held by the commission for a maximum of six months pending approval of the application for one or more grades of certificates. If the application is not approved within six months for one or more grades of certificate, the applicant shall submit a new application with the appropriate fee and retake the examination.

(f) Any applicant for a Grade A certificate shall meet qualification requirements and submit the appropriate fee before taking the examination. An approved application will be held for a maximum of nine months, then discarded if an examination has not been taken.

#### **§290.32. Examinations.**

(a) The passing score for the examination for each grade of certificate shall be 70%.

(b) Any applicant who fails to pass an examination may repeat the same examination after a period of 90 days following the date of the previous examination. Following the failure of an initial examination, the application shall be held for a maximum of 12 months pending the repeat of the



examination. During this period, the examination may be retaken twice more without payment of an additional fee. If the examination is not repeated within 12 months, the applicant shall submit another application with the appropriate fee.

(c) Examinations shall be supervised by the commission, by any member of the committee, or by any person designated by the commission. Examinations shall be given at places and times determined by the commission, by any member of the advisory certification committee, or by persons designated by the commission.

(d) Examinations shall be graded by the commission or by any member of the advisory certification committee, at the request of the commission.

### **§290.33. Certificates.**

(a) Issuance of certificates.

(1) Upon satisfactory fulfillment of the requirements provided in these rules and regulations, a suitable certificate shall be issued by the commission.

(2) Dual surface and groundwater certificates will not be issued unless the operator has duties in both groundwater and surface water. However, a distribution certificate may be held in addition to a ground or surface water certificate.

(3) The certificate shall be prominently displayed in the utility plant or office of the certified operator.

(4) Distribution certificates of competency were developed for operators having solely distribution system responsibilities. Operators working in distribution systems may be certified as distribution system operators and are not required to be certified as ground or surface water treatment plant operators. A certified distribution system operator may perform only those duties relating to the operation and maintenance of distribution systems.

(5) An operator holding a valid groundwater or surface water certificate may perform all duties relating to distribution systems, and need not hold a distribution certificate.

(6) Operators holding a valid Grade B or C surface water certificate on August 12, 1991 may exchange the certificate for the same grade of groundwater certificate without examination and without meeting the groundwater experience requirement provided: the required designated courses have been completed; the appropriate application and fee have been submitted; the operator can demonstrate a need for the groundwater certificate; and the exchange is made within two years following the effective date of these rules.

(7) Operators holding a valid Grade B or C groundwater certificate on August 12, 1991 may exchange the certificate for the same grade of surface water certificate without examination and without meeting the surface water experience requirement provided: the required designated courses have been completed; the appropriate application and fee have been submitted; the operator can demonstrate a need for the surface water certificate; and the exchange is made within two years following the effective date of these rules.

(8) Upon application and payment of the appropriate fee, an operator who maintains a valid certificate for 30 years shall retain his certification in perpetuity.

(9) Grade A certificates previously issued in perpetuity will remain perpetual certificates.

(b) Period of validity of certificates.

(1) The period of validity shall be as follows:

(A) Grade A: eight years;

(B) Grade B: five years;

(C) Grade C: three years;

(D) Grade D: two years.

(2) The certified operator shall inform the commission of any change in address or employment during the period of validity of the certificate.

(c) Renewal of certificates.

(1) Certificates may be renewed, unless revoked or replaced by a higher grade of certificate.

(2) The following requirements shall be met for renewal of each certificate along with payment of the appropriate fee:

(A) certificates may be renewed by substitution of hours if the required training credits and the appropriate fee are submitted within 30 days following the expiration date of the certificate. Training required for renewal is as follows: grade a - 80 hours; grade b - 50 hours; grade c - 30 hours; grade - 20 hours.

(B) certificates may be renewed by retaking and passing the written examination within 30 days following the expiration date of the certificate, in which case renewal shall be effective on the date of examination.

(C) when the certificate of an operator expires while he or she is in military service, it may be renewed without examination upon proof of military service and of the previously held certificate.

(3) Operators may be recertified by passing the appropriate examination up to one year following a certificate's expiration date without meeting current training requirements. Operators who wish to recertify after one year following a certificate's expiration date must meet the current training requirements.

(4) The basic water course may not be used to meet renewal requirements for Grade A or Grade B certificates after one year following the effective date of these rules.

(5) Training credit hours may be used only once for renewal purposes and must be earned before the issuance date and expiration date of the certificate.

(6) When the certificate of an operator expires while he or she is in military service, it may be renewed without examination upon proof of military service and of the previously held certificate.

(d) Application renewal procedure.

(1) Before the expiration date of the certificate, the commission shall mail to the certified operator a renewal application showing the expiration date, the requirements for renewal, and the fee to be paid. The commission shall mail the renewal application to the operator at the most recent address provided by the operator to the commission.

(2) The operator shall return the renewal application with the appropriate fee to the commission, and shall submit any required record or evidence of completion of training credit.

(3) Upon the applicant's satisfactory fulfillment of the requirements for renewal provided in these rules and regulations, a suitable renewal certificate shall be issued by the commission.

(e) Suspension or revocation of certificates.

(1) The certificate of an operator shall be suspended or revoked if:

(A) the certificate was issued erroneously;

(B) the operator obtained the certificate through fraud, deceit, or through the submission of incorrect data on his/her qualifications; or

(C) the operator practiced fraud and deceit, or failed to use reasonable care, judgment, or application of his or her knowledge in the performance of his or her duties.

(2) When the commission has reason to believe that charges against a certified operator may be valid, the commission shall notify the operator by personal service or certified mail at his last known address:

(A) of the charges made against him/her;

(B) that it intends to conduct an examination of the charges;

(C) that the operator has an opportunity to refute and prove the charges invalid.

(3) After the commission's examination of the charges and the operator's rebuttal, if the commission still has reason to believe there is cause for suspension or revocation, the commission shall initiate a formal hearing in accordance with the commission's formal hearing procedures.

(4) Upon revocation of an operator's certificate, a new certificate shall not be obtained for at least one year and until his/her application is approved by the certification committee and all other requirements of the rules have been met.

(5) Upon suspension of an operator's certificate for one year, reinstatement may be considered upon approval by the advisory certification committee.

(6) An operator may be placed on "probation" if, in the judgment of the commission, he/she commits an offense not serious enough to warrant suspension or revocation of the certificate. Such "probationary" status shall serve as a warning to the operator and additional or repeat offenses shall warrant suspension or revocation proceedings. The period of probation shall be at the discretion of the commission, and may vary depending upon the circumstances and nature of the offense. Notification and rebuttal procedures for probation shall be the same as for suspension and revocation except that the commission shall not be required to hold a formal hearing in accordance with paragraph (3) of this subsection.

#### **§290.34. Training Approval.**

(a) Training used to meet the requirements for obtaining or renewing water certificates shall be in water related topics, as determined by the commission.

(b) Training credit for attendance at meetings of Districts and approved chapters of the Texas Water Utilities Association shall be allowed only when the meeting includes a training session related to waterworks or wastewater operations. Training credit shall be allowed in accordance with the following provisions:

(1) District monthly meetings: two hours of credit per meeting attended and verified.

(2) District all day meetings: one hour of credit per hour of verified attendance.

(3) Training credit shall be based upon the attendance report submitted by the Texas Water Utilities Association.

(4) Persons earning training hours at district meetings may use these hours toward obtaining renewal certificates and new certificates where allowed under these rules.

(c) Training credit for attendance at training sessions of annual or regional water utilities schools, sponsored by the Texas Water Utilities Association and/or districts, recognized by the commission, shall be allowed in accordance with the following provisions:

(1) annual or regional school: 1 hour of credit per hour in attendance at training sessions.

(2) training credit shall be based upon attendance recorded by the commission or by other means determined by the commission.

(d) Training credit for certification will be granted for those courses which have been reviewed and approved by the commission prior to the receipt of the training.

(e) Upon application, an individual may be granted four hours of training credit for presenting one hour of training at the annual school or regional schools of the Texas Water Utilities Associations and 10 hours of training credit for articles published in journals such as the American Water Works Association, Texas Water Utilities Association Journal, and others relating to the water utilities industry.

#### **§290.35. Reciprocity.**

The commission may issue certificates, without examination, to applicants who hold valid certification issued under laws of any other state, territory, or possession of the United States of America or any country provided:

- (1) the out-of-state requirements are equal to the provisions of the Texas regulations;
- (2) the applicant passed a written examination in obtaining the out-of-state certificate;
- (3) the corresponding state reciprocates with operators holding Texas certificates;
- (4) the applicant lives in Texas or is employed in the waterworks field in Texas; and
- (5) the appropriate fee has been paid.

#### **§290.36. Fees.**

(a) The Health and Safety Code, §341.034(b), requires the payment of a fee of \$10 per year before a certificate of competency can be issued or renewed. Fees for certification shall be established as follows.

- (1) Application fees:
  - (A) Grade D certificate--\$20;
  - (B) Grade C certificate--\$30;
  - (C) Grade B certificate--\$50;
  - (D) Grade A certificate--\$80.
- (2) Renewal fees:
  - (A) Grade D certificate--\$20;

(B) Grade C certificate--\$30;

(C) Grade B certificate--\$50;

(D) Grade A certificate--\$80.

(b) Certificates that have not been renewed within 30 days of the expiration date with the appropriate fee will be considered invalid. A new certificate shall be obtained by submitting a new application with the appropriate fee and receiving a passing score on the examination if application is made within 12 months following the expiration date of the certificate.

(c) Fees shall be paid by personal check, cashier's check, or money order. Cash cannot be accepted for payment of fees.

(d) An applicant or holder of a certificate shall pay all required fees before taking the examination or receiving a certificate of competency.

(e) All fees shall be made payable to the Texas Natural Resource Conservation Commission and are not refundable.

(f) If an applicant does not submit the appropriate payment with the new or renewal application, the certificate shall not be issued.